

Claims

- [c1] A positioning stage, comprising:
- a base having a first rail on its top surface;
 - a first table slidable along said first rail and having a second rail perpendicular to said first rail on its top surface;
 - a first joint freely movable together with said first table toward said first rail relative to said base;
 - a first clutch for fixing said first joint to said base or releasing it from said base;
 - first forcibly-moving means for moving said first table toward said first rail relative to said first joint;
 - a second table slidable along said second rail;
 - a second joint freely movable together with said second table toward said second rail relative to said first rail;
 - a second clutch for fixing said second joint to said first table or releasing it from said first table; and
 - a second forcibly-moving means for moving said second table toward said second rail relative to said second joint.
- [c2] The positioning stage according to Claim 1, wherein said first table is moved toward said first rail relative to said

base by said first forcibly-moving means when said first clutch secures said first joint to said base, while said second table is moved toward said second rail relative to said first table by said second forcibly-moving means when said second clutch secures said second joint to said first table.

[c3] The positioning stage according to Claim 2, wherein said first table becomes freely slidable relative to said base when said first clutch releases said first joint from said base, while said second table becomes freely slidable relative to said first table when said second clutch releases said second joint from said first table.

[c4] The positioning stage according to Claim 3, wherein said base comprises a plate parallel to said first rail on its top surface,
said first clutch comprises a first clamping mechanism for clamping said plate,
said first table comprises a plate parallel to said second rail on its top surface, and
said second clutch comprises a second clamping mechanism for clamping said plate.

[c5] The positioning stage according to Claim 4, wherein said first joint comprises a female screw,
said first forcibly-moving means comprises a male screw

threaded into said female screw,
said second joint comprises a female screw, and
said second forcibly-moving means comprises a male
screw threaded into said female screw.

[c6] The positioning stage according to Claim 5, wherein
said first clutch comprises a first clutch driving means,
a first switch for driving said first clutch driving means is
provided on an outer peripheral surface of a base, a first
table or a second table,
said second clutch comprises a second clutch driving
means,
a second switch for driving said second clutch driving
means is provided on an outer peripheral surface of the
base, the first table or the second table.

[c7] The positioning stage according to Claim 6, comprising:
a driving means for sliding said first table along said first
rail; and
a driving means for sliding said second table along said
second rail.

[c8] The positioning stage according to Claim 6, wherein
said first joint and said first clutch are built into said first
table, and
said second joint and said second clutch are built into
said second table.

[c9] A positioning stage, comprising:
a base having a rail on its top surface;
a table slidable along said rail;
a joint freely movable together with said table toward
said rail relative to said base;
a clutch for fixing said joint to said base or releasing it
from said base; and
forcibly-moving means for moving said table toward said
rail relative to said joint.